

ABSTRACT OF THE DISCLOSURE

In a disk array of the RAID constitution, a likelihood of occurrence of a failure is predicted from the number of times of error occurrence for each of disk drives #0 to #3 in a certain parity group, two storage areas #0_UH and #2_LH of a half size, which are different in data stripes from each other, are selected from two disk drives #0 and #2 having a relatively high likelihood of occurrence of a failure, respectively, and copied to a spare disk #A (divided data copy). When the likelihood of occurrence of a failure of one disk drive #0 further increases, the remaining half storage area #0_LH of the disk drive #0 is copied to the spare disk #A (dynamic sparing). Dynamic sparing time is reduced and a likelihood of data lost due to a multiple disk failure decreases according to the divided data copy.